

Time	Title	Speaker/Authors
08:35 - 08:50	Opening Remarks	Manuela Veloso (CMU), Isabelle Moulinier (Capital One)
08:50 - 09:10	Invited Talk 1: Fairness and Causality with Missing Data	Madeleine Udell (Cornell)
09:10 - 09:30	Invited Talk 2: Building Augmented Intelligence for a Global Credit Rating Agency	Sameena Shah (S&P Global)
09:30 - 10:30	Panel: Explainability, Fairness and Human Aspects in Financial Services	Madeleine Udell (Cornell), Jiahao Chen (Capital One), Nitzan Mekel-Bobrov (Capital One), Manuela Veloso (CMU), Jon Kleinberg (Cornell), Andrea Freeman (U. Hawaii), Samik Chandarana (JP Morgan), Jacob Sisk (Credit Suisse), Michael McBurnett (Equifax)
10:30 - 11:00	Break	
11:00 - 11:20	Invited Talk 3: Fairness in Allocation Problems	Michael Kearns (UPenn)
11:20 - 12:00	Paper Presentations	
	11:20-11:28 In (Stochastic) Search of a Fairer Alife	Dmitriy Volinskiy (ATB Financial)*; Lana Cuthbertson (ATB Financial); Omid Ardakanian (University of Alberta)
	11:28-11:36 Where's the Bias? Developing Effective Model Governance	Galen Harrison (University of Chicago)*; Natasha Duarte (Center for Democracy & Technology); Joseph Hall (Center for Democracy & Technology)
	11:36-11:44 Scalable Graph Learning for Anti-Money Laundering: A First Look	Mark Weber (MIT-IBM Watson AI Lab)*; Jie Chen (IBM Research); Toyotaro Suzumura (IBM T.J. Watson Research Center); Aldo Pareja (IBM); Tengfei Ma (IBM Research); Hiroki Kanezashi (IBM T.J. Watson Research Center)
	11:44-11:52 Fair Resource Allocation in a Volatile Marketplace	MohammadHossein Bateni (Google Research); Yiwei Chen (University of Cincinnati)*;

		Dragos Florin CIOCAN (INSEAD); Vahab Mirrokni (Google)
	11:52-12:00 Algorithmic Confidence - A key Criterion for XAI and FAT	Ulf Johansson (Jönköping University)*; Cecilia Sönströd (University of Borås)
12:00 - 01:30	Lunch	
01:30 - 01:50	Invited Talk 4: When Algorithms Trade: Modeling AI in Financial Markets	Michael Wellman (U. Michigan)
01:50 - 02:10	Invited Talk 5: ML-Based Evidence that High Frequency Trading Has Made the Market More Efficient	Tucker Balch (Georgia Tech)
02:10 - 02:50	Paper Presentations	
	02:10-02:18 Accurate, Data-Efficient Learning from Noisy, Choice-Based Labels for Inherent Risk Scoring	W. Ronny Huang (Ernst & Young LLP); Miguel Perez (Ernst & Young LLP)*
	02:18-02:26 An AI-based, Multi-stage detection system of banking botnets	Li Ling (JPMorgan Chase)*; Erwan Le Doeuff (JPMorgan Chase)
	02:26-02:34 Robust Classification of Financial Risk	Suproteem Sarkar (Harvard University)*
	02:34-02:42 An Empirical Evaluation of Deep Sequential Models for Volatility Prediction	Qiang Zhang (American International Group)*; Rui Luo (American International Group); Yaodong Yang (American International Group); Yuanyuan Liu (AIG)
	02:42-02:50 Computer-Assisted Fraud Detection, from Active Learning to Reward Maximization	Christelle Marfaing (Lydia)*; Alexandre Garcia (Telecom ParisTech)
02:50 - 03:00	Announcement: FICO XAI Challenge Winners	Arash Nourian (FICO)
03:00 - 03:30	Break	
03:30 - 03:50	Invited Talk 6: Is it possible to have interpretable models for AI in Finance?	Cynthia Rudin (Duke)
03:50 - 04:30	Paper Presentations	
	03:50-03:58 Use of Machine Learning Techniques to Create a Credit Score Model for Prepaid Basic Services in East Africa. Case Study: Airtime Loans	Patrick McSharry (Carnegie Mellon University); Yvonne Wambui (Hepta Analytics)*;

		Bernard Dushimimana (Carnegie Mellon University); Timothy Lubega (Carnegie Mellon University)
	03:58-04:06 Towards Global Explanations for Credit Risk Scoring	Irene Unceta (BBVA Data & Analytics)*; Jordi Nin (BBVA Data & Analytics); Oriol Pujol Vila (Universitat de Barcelona)
	04:06-04:14 Interpretable Credit Application Predictions With Counterfactual Explanations	Rory Mc Grath (Accenture Labs); Luca Costabello (Accenture Labs)*; Chan Le Van (Accenture Labs); Paul Sweeney (Accenture); Farbod Kamiab (Accenture); Zhao Shen (Accenture); Freddy Lecue (INRIA)
	04:14-04:22 Interpretable Feature Selection Using Local Information for Credit Assessment	Sangwoong Yoon (Seoul National University)*
	04:22-04:30 Towards Explainable Deep Learning for Credit Lending: A Case Study	Ceena Modarres (Capital One); Mark Ibrahim (Capital One Center for Machine Learning)*; Melissa Louie (Capital One Center for Machine Learning); John Paisley (Columbia University)
04:30 - 05:40	Posters	
	Clustering and Learning from Imbalanced Data	Naman D Singh (Indian Institute of Technology Ropar)*; Abhinav Dhall (Indian Institute of Technology Ropar)
	Deep Hedging: Hedging Derivatives Under Generic Market Frictions Using Reinforcement Learning	Hans Buehler (JPMorgan); Lukas Gonon (Eidgenoesische Hochschule Zuerich); Josef Tecihmann (Eidgenoesische Hochschule Zuerich); Ben Wood (JP Morgan)*; Baranidharan Mohan (JP Morgan); Jonathan Kochems (JP Morgan)
	Generating User-friendly Explanations for Loan Denials using GANs	Pouya Pezeshkpour (UCI); Ramya M Srinivasan (Fujitsu Laboratories of America)*; Ajay Chander (Fujitsu Laboratories of America)
	Practical Deep Reinforcement Learning Approach for	Zhuoran Xiong (Columbia

	Stock Trading	University); Xiao-Yang Liu (Columbia University)*; Shan Zhong (Columbia University); Hongyang Yang (Columbia University); Anwar Walid (Bell Laboratories)
	Idiosyncrasies and challenges of data driven learning in electronic trading	Vacslav Glukhov (JP Morgan)*; Vangelis Bacoyannis (JP Morgan); Tom Jin (JP Morgan); Jonathan Kochems (JP Morgan); Doo Re Song (JP Morgan)
	Machine learning-aided modeling of fixed income instruments	Daniel Martin (Carnegie Mellon University)*; Barnabas Poczos (Carnegie Mellon University); Burton Hollifield (Carnegie Mellon University)
	An Interpretable Model with Globally Consistent Explanations for Credit Risk	Chaofan Chen (Duke University); Kangcheng Lin (Duke University); Cynthia Rudin (Duke)*; Yaron Shaposhnik (Rochester); Tong Wang (University of Iowa); Sijia Wang (Duke University)
	Continual learning augmented investment decisions	Daniel Philps (City, University of London)*; Tillman Weyde (City, University of London); Artur Garcez (City University of London); Roy Batchelor (CASS, City University of London)
	HELOC Applicant Risk Performance Evaluation by Topological Hierarchical Decomposition	Kyle A Brown (Wright State University)*; Derek Doran (Wright State University)
	Looking Deeper into the Deep Learning Models: Attribution-based Explanations of TextCNN	Iftitahu Ni'mah (Eindhoven University of Technology)*; Wenting Xiong (Eindhoven University of Technology); Werner van Ipenburg (Cooperatieve Rabobank U.A.); Jan Veldsink (Cooperatieve Rabobank U.A.); Mykola Pechenizkiy (TU Eindhoven)
	Matrix Regression and Its Applications in Cryptocurrency Trading	HANG Zhang (Cornell University)*; Yandong Li (Cornell University); YIKUN WANG (Cornell University);

		Rongguang Wang (Cornell University)
	Sensitivity based Neural Networks Explanations	Enguerrand Horel (Stanford University)*; Virgile Mison (J.P. Morgan); Tao Xiong (J.P. Morgan); Kay Giesecke (Stanford University); Lidia Mangu (J.P. Morgan)
	On the Need for Fairness in Financial Recommendation Engines	Sirui Yao (Virginia Tech)*; Bert Huang (Virginia Tech)
	Read the News, not the Books: Predicting Firms' Financial Health	Sophie Zhai (Iowa State University)*; Zhu (Drew) Zhang (ISU)
05:40-05:45	Closing Remarks	